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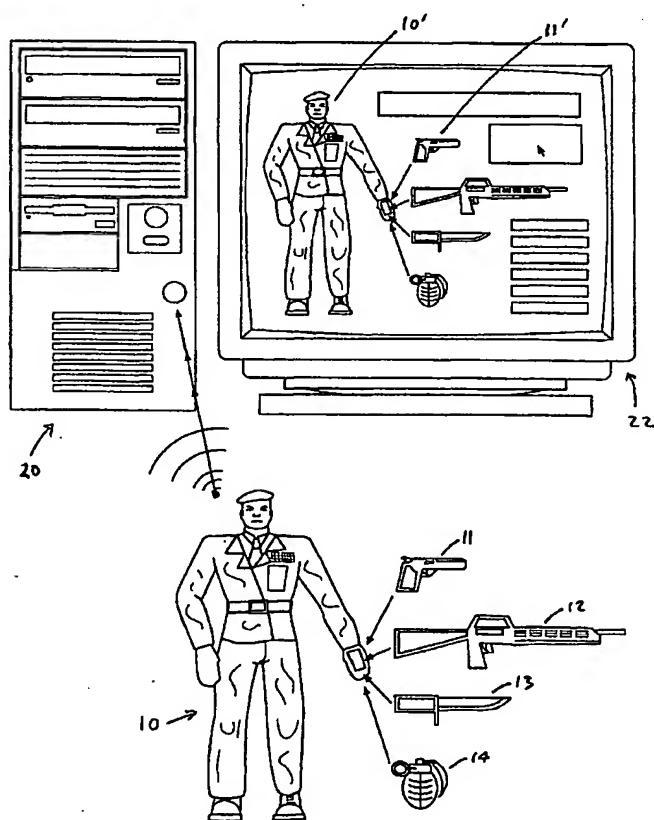
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(54) Title: COMPUTER GAME



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(57) Abstract: A computer game in which a physical model (10) of a character, machine or appliance is coupled to a computer (20) and images (10') of the character, machine or appliance are displayed on the computer monitor (22) when playing the game, and the model (10) is provided with a number of accessories (11, 12, 13, 14) selectively attachable to it and providing an identifying signal to the computer, so that the displayed images (10') of the character, machine or appliance include images (e.g. 11') of the accessory attached to the model.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Computer Game

The present invention relates to computer games.

Computer games are increasing popular with children and the value of such activity is increasingly recognised. I have now devised a computer game which substantially enhances the 5 enjoyment and value to be obtained from its play.

In accordance with the present invention, there is provided a computer game in which a physical model of a character, machine or appliance is coupled to the computer and images of the character, machine or appliance are displayed on 10 the computer monitor when playing the game, and the model is provided with a number of accessories selectively attachable to it and providing an identifying signal to the computer, so that the displayed images of the character, machine or appliance include images of the accessory attached to the 15 model.

The player is able to decide which accessory (or accessories) to attach to the model. The corresponding images displayed on the computer monitor will include the same accessory or accessories. For example, the model may be of a 20 commando or action man, to which a variety of different weapons may be attached: if a hand-gun is attached to the hand of the model, then the commando appearing in the visual display will include, and use, a corresponding hand-gun.

The model may be of any human character, or of an 25 animal, or a vehicle, aircraft or any other machine or appliance. The accessories may be of any appropriate form and attach to the model at any appropriate positions.

The model includes a circuit arranged to provide an output signal identifying the accessory (or accessories) 30 attached to it (and also, if appropriate, the position on the model at which these are attached). The output signal may be coupled to the computer over a lead connected to its serial port, or over a radio or infra red link.

Typically a games package as marketed comprises the 35 model, means for coupling the model to a computer, and games software to run on the computer: the package may comprise one

or more accessories for attaching to the model; further accessories may be purchased separately.

The game may be arranged to be played on-line via the internet. Alternatively, the game may be arranged to be played 5 on a stand-alone computer.

It will be appreciated that the computer monitor will display an environment in which the displayed character, machine or appliance will take an active part. The model or toy may be played with independently of the computer game, and 10 vice versa.

An embodiment of the present invention will now be described by way of example only and with reference to the accompanying drawing, in which:

FIGURE 1 is a schematic view showing a toy character 15 and a personal computer with which it is used, in accordance with the present invention; and

FIGURE 2 is a schematic block diagram of a games apparatus in accordance with the invention.

Referring to the drawings, there is shown a toy 20 character 10 in the form of a commando or action man. A number of accessories for use by the toy character 10 are also shown, namely a hand-gun 11, an automatic gun 12, a knife 13 and a hand-grenade 14: a variety of other accessories may be provided or obtained separately. In the example shown, each of the 25 accessories may be physically attached to the hand of the toy character 10: the character 10 includes an internal electrical circuit C which is arranged to provide an output signal S, identifying the accessory attached to the character, at an output port on the back of the toy character 10.

30 For playing a computer game, the toy character is used with a personal computer, shown at 20 with its monitor at 22. A lead L is provided to couple the output port of the toy character 10 to the serial port of the computer 20: an 8-port hub may be used, to enable up to 8 different toy characters to 35 be coupled to the computer, the player selecting which of these toys to use at any given time; a number of such hubs can be cascaded together, to further increase the number of characters

which can be coupled to the computer. In an alternative, either a radio link or an infra red link may be used to communicate the output signal S from the toy character 10 to the computer 20.

5 The computer 20 includes internet access for playing a game on-line, the game involving the display of an environment in which the toy character 10 takes part. The character 10 is supplied with corresponding software, typically on CD-ROM, to run on the computer. The computer monitor 22 displays active 10 images 10' of the character 10', these images 10' including which accessory is currently attached to the toy: thus, if the hand-gun 11 is attached to the hand of the toy character, then the images 10' seen on the monitor 22 will include the hand-gun 11'. The game is then played, with the virtual character 15 holding and using the hand-gun.

Whilst the above-description concerns a game played over the internet, it may instead be self-contained on a stand-alone computer.

Whilst the above-description concerns the use of a toy 20 character in the form of a commando, the toy character may take any alternative form. Further, the principles of the invention are applicable to toys or models other than human character, and may be applied to toy animals, toy vehicles, toy aircraft etc.

25 The toy character or other model may be played with independently of the computer. Likewise, the computer game may be played independently of the toy character or other model: in particular, the computer may be controlled directly, via the mouse or keyboard, to select the accessory attached to the 30 character or model as appearing in the game.

Claims

- 1) A computer game in which a physical model of a character, machine or appliance is coupled to the computer and images of the character, machine or appliance are displayed on the computer monitor when playing the game, and the model is provided with a plurality of accessories selectively attachable to it and providing an identifying signal to the computer, so that the displayed images of the character, machine or appliance include images of the accessory attached to the model.
- 2) A computer game as claimed in claim 1, in which said model includes a circuit arranged to provide an output signal identifying the accessory or accessories attached to it.
- 3) A computer game as claimed in claim 2, in which said output signal also identifies the position on said model at which the or each accessory is attached.
- 4) A computer game as claimed in claim 2 or 3, further comprising a lead for coupling said signal to the serial port of the computer.
- 5) A computer game as claimed in claim 2 or 3, in which said circuit comprises means for coupling said signal to the computer over a radio or infra red link.
- 6) A computer games package comprising a model of a character, machine or appliance, said model being arranged for a selected accessory to be attached to it and to provide a signal to the computer, said signal identifying the accessory attached to the model, and games software to run on the computer such that images of said character, machine or appliance are displayed on the computer monitor when playing the game, the displayed images of the character, machine or appliance including images of the accessory attached to the

model.

7) A computer games package as claimed in claim 6, further comprising one or more accessories for selective attachment to said model.

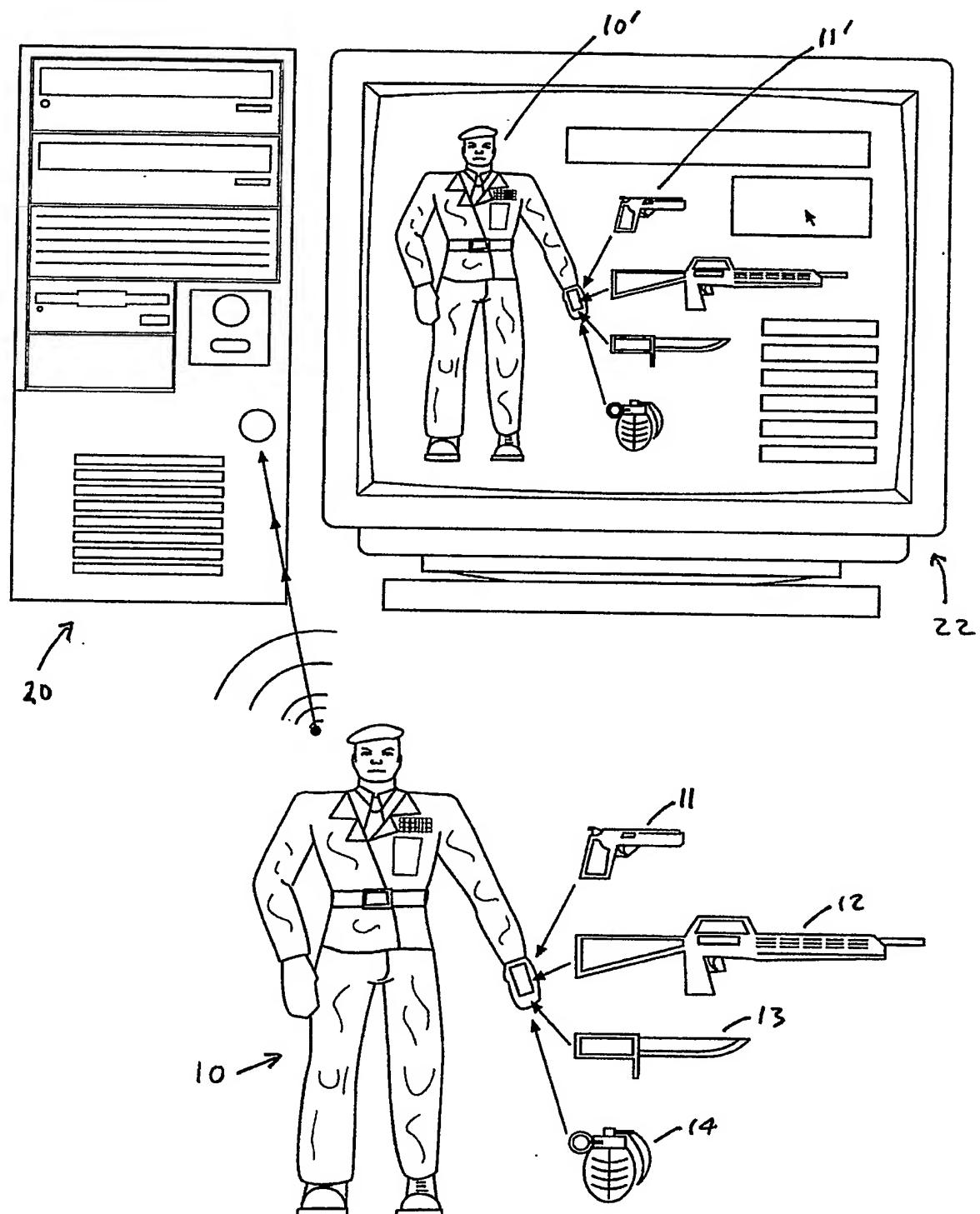


Figure 1

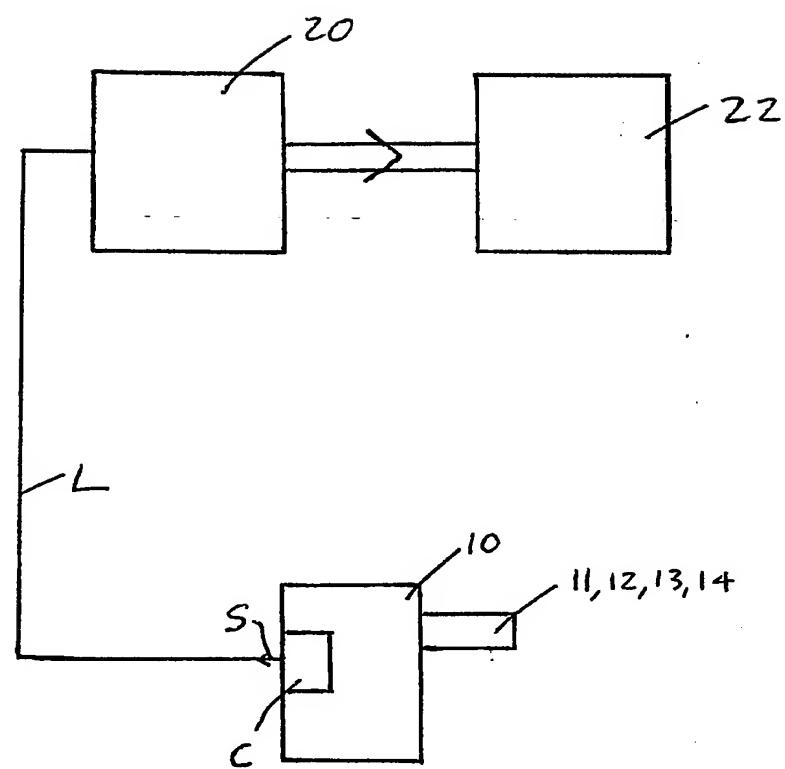


Figure 2

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